



NOAA in the Hawaiian Islands



NOAA Offices

➤ **NOAA Pacific Services Center**

The NOAA Pacific Services Center (PSC) was established in 2001 as a collaborative NOAA regional effort to develop and deliver coastal management information and services to the coastal resource management communities in the State of Hawai'i, Territories of American Samoa and Guam, and the Commonwealth of the Northern Mariana Islands. The island-based philosophy of the PSC ensures the delivery of these products and services reflects global perspectives and local diversity. To learn more about the NOAA Pacific Services Center, please visit the website at:

<http://www.csc.noaa.gov/psc>.

➤ **Hawaiian Islands Humpback Whale National Marine Sanctuary**

The sanctuary takes a proactive approach to educating the public about the value of the humpback whale and its habitat. The site of the main sanctuary headquarters in Kihei, Maui offers the experience of "a living classroom," where observers can learn about the whale and enjoy some whale watching on the deck--at a safe and non-intrusive distance. The site offers world-renowned natural beauty and presents many opportunities to learn about the ecology, biology, culture and history that are part of the spectacular setting. For more information visit the website at:

<http://hawaiihumpbackwhale.noaa.gov/education/Education.html>

➤ **Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve**

The remoteness of this vast ocean region presents special challenges for educational opportunities. The Reserve's educational initiatives consist of distance learning via the web and other remote access technologies and opening of a NWHI Discovery Center in Hilo, Hawai'i. The Reserve's educational effort centers around increasing understanding of ecosystem management, and emphasizes the necessity of protecting this area as possibly the last large-scale predator-dominated coral reef ecosystem on Earth. All educational activities stress the importance of conservation and seek to actively engage the public in management of the Reserve. For more information visit the website at:

<http://www.hawaiireef.noaa.gov/education/welcome.html>

➤ **National Geodetic Survey**

Geodetic State Advisor program provides instruction on how to use the National Spatial Reference System (the foundation for transportation and communication, mapping, charting and other applications). Education programs are available on Global Positioning System (GPS) and planning and coordinating field surveys. For more information contact Edward E. Carlson, Pacific Region Geodetic Advisor, National Geodetic Survey, (808) 532-3205.

➤ **Office of Response and Restoration**

Everyday, oil spills, hazardous material releases, vessel groundings, and fierce storms assault our Nation's coasts. The Office of Response and Restoration (OR&R) is the focal

point within NOAA to prevent, plan for, and respond to these disasters. On behalf of the public, OR&R and its partners protect and restore coastal resources through the application of science and technology. OR&R also empowers communities by providing training, guidance, and the decision-making tools that will help improve the health of our coasts. OR&R's Hazardous Material Response Division and Coastal Protection and Restoration Division are headquartered in Seattle. Additional information about OR&R can be found at <http://response.restoration.noaa.gov>.

NOAA Programs

➤ **Sanctuary Ocean Count**

A shorebased humpback whale monitoring project that involves a population census and documentation of surface behaviors. Volunteers are trained to count the whales, record observations of selected surface behaviors, and map the location of whales from selected shoreline locations. For more information, visit the website at <http://hawaiihumpbackwhale.noaa.gov> and call Christine Brammer at 808-397-2654 or Jean Souza at 808-246-2860.

➤ **Humpback Whale Research and Monitoring Projects**

Teachers and students are encouraged to (a) design and undertake various research and/or monitoring projects which focus on the endangered humpback whale and its habitat in Hawaii; (b) conduct regularly scheduled whale watches; or (c) become familiar with one or more of the humpback whale research projects undertaken by scientists. One such study is the SPLASH (Structure of Population, Levels of Abundance and Status of Humpback Whales) Research Project--a 3-year study of humpback whales in the North Pacific involving 7 nations and dozens of researchers. Research is aimed at answering: How many humpback whales are in the North Pacific? Where are they? How are they related? What is the status of their health? What proportions are pregnant? What are they feeding on? Scientists will be photographing whale flukes (tails) and obtaining small, non-lethal biopsy samples. For more information, visit the website at <http://hawaiihumpbackwhale.noaa.gov> and call Christine Brammer at 808-397-2654 or Jean Souza at 808-246-2860.

➤ **Sanctuary Student Ambassador Program**

What better incentive for students to learn about humpback whales and the National Marine Sanctuary Program than by committing to teaching others about what they have learned. The Hawaiian Islands Humpback Whale National Marine Sanctuary will work with students and teachers to learn more about this endangered species and its habitat in Hawaii. For more information, call Joylynn Oliveira at 800-831-4888 or Jean Souza at 808-246-2860.

➤ **LiMPETS (Long-term Monitoring Program and Experiential Training for Students)**

LiMPETS is for middle school, high school, and other volunteer groups to monitor rocky intertidal, sandy shore and offshore areas in Hawaii. This program is based upon and linked with a similar program implemented in five west coast National Marine

Sanctuaries (Olympic Coast, Cordell Bank, Gulf of the Farallones, Monterey Bay, and Channel Islands). The Sanctuary and partners are developing a program to monitor the abundance and distribution of selected biota. For more information, contact Jean Souza at 808-246-2860.

➤ **Mokupapapa: Discovery Center for Hawaii's Remote Coral Reefs**

The Reserve has an educational discovery center located in Hilo Hawaii that highlights the special marine environment and cultural history of the Northwestern Hawaiian Islands. Planned programs that will be run out of the facility in the near future are community reef walks, monthly lecture series and school or community group tours. The facility has a 60-person multimedia theater where programs can be held. There is also a classroom/wet-lab area that is still under construction but will be an excellent classroom venue for marine education. Programs that use the facility for part of their educational program would be welcome and supported. For more info about the center visit the web site: <http://hawaiiireef.noaa.gov/center/welcome.html>

➤ **Navigating Change**

Navigating Change is an educational partnership among government and non-government agencies that is designed to raise awareness about Hawaii's unique marine environment and what people can do to be better stewards to our island home. Workshops that show teachers how they can bring these messages into their classrooms have been conducted throughout the state and are ongoing, and many high quality educational materials have been produced, including five video modules, and an educational packet. In the Spring of 2004 the Polynesian voyaging canoe Hokule`a will be traveling up the Hawaiian archipelago to Kure atoll to highlight the special marine environment of the Northwestern Hawaiian Islands and how we can use knowledge of the special place to better care for our main Hawaiian Islands. For more information on Navigating Change go here: <http://www.hawaiiatolls.org/research/NavChange2002/index.php>

➤ **Year of the Living Reef 2004**

Over the past 1.5 years federal, state, non-governmental agencies, including private and community groups have been preparing for a statewide coral reef campaign referred to as "Hawaii's Living Reef" project. The goal of Hawaii's Living Reef program is to raise general public awareness of the importance of our coral reef ecosystems to Hawaii's lifestyle and to teach and encourage behaviors that will protect and nurture this life-giving natural resource. At the same time this project will strengthen communication and collaboration among the education and conservation communities. This project will launch in Spring 2004.

➤ **Association of Fishponds of Maui**

`Ao`ao O Na Loko I`a O Maui (Association of the Fishponds of Maui) is a non-profit 501(c)3 organization dedicated to the revitalization of Maui's Native Hawaiian fishponds. The first restoration project is currently being implemented at Ko`ie`ie Fishpond, located adjacent to the headquarters of the Hawaiian Islands Humpback Whale National Marine Sanctuary in Kihei, Maui, Hawai`i. The Association works

collaboratively with the Sanctuary to educate students and visitors about the environmental and cultural values of the fishpond and how it correlates to the health of sanctuary waters and its resources. Fishponds were used for hundreds of years by Native Hawaiians to raise various fish for consumption by Hawaiian royalty and the community. Today, it is being preserved to educate the public and perpetuate Hawaiian cultural traditions and practices. To learn more about this project, visit the website at: www.mauifishpond.com

Other Links:

➤ **Ocean Explorer**

The Deep East 2001 Voyage of Discovery: Classroom teachers working with NOAA during July 2001 developed a series of lesson plans for students in Grades 5 – 12 that are specifically tied to the Deep East 2001 Voyage of Discovery. These lesson plans focus on cutting-edge ocean exploration and research, using state-of-the-art technology, aboard one of the nation's most sophisticated research vessels, the R/V Atlantis and its submersible Alvin. The lesson plans focus specifically on the importance of ocean exploration and the research taking place during the Deep East 2001 Voyage of Discovery, and feature such topics as deep-sea corals off George's Bank, biodiversity and materials transport at the Hudson Canyon, and gas hydrates on the Blake Ridge. The lesson plans were developed for Grades 5-6, Grades 7-8, and Grades 9-12 (chemical, biological, earth, and physical science). For more information, visit the website at: <http://oceanexplorer.noaa.gov/explorations/deepeast01/background/education.html>

➤ **Science with NOAA Research**

This web page provides middle school science students and teachers with research and investigation experiences using on-line resources. Teachers will find information that will help them prepare students for investigating the various sites in this program. Even if the teacher does not have much experience in using web-based activities in science classes, the directions are easy to follow. Topics include ocean temperatures, currents, fisheries, and the Great Lakes. For more information visit the website at: www.oar.noaa.gov/k12/

➤ **A Resource for Teachers**

This resource guide, originally developed as part of the 125th Anniversary activities for the National Marine Fisheries Service, can be used in the classroom for students K-12. The packet includes 48 marine fisheries and marine resources worksheets or outlines (plus answer sheets) which can be photocopied. For more information please visit the website at: www.afsc.noaa.gov/sep/ResGuide_framed.htm

➤ **NOAA's Resource Guide for Teachers of Marine Science**

This resource guide was prepared by staff of the National Marine Fisheries Service to provide a guide on Coastal Awareness in Science for elementary, junior high and high school science teachers. Its purpose is to promote the exploration of ecology and coastal awareness. The guide is divided into a reference to books at the elementary, middle, and high school levels; as well as a section on teacher resources with curriculum guides, lesson plans, bibliographic collections, etc. and audiovisual materials for all age levels,

includes CD-ROM, Film and Video. This guide can also be found in a .pdf format at noaabibl.pdf. For more information please visit the website at:
<http://swfsc.ucsd.edu/bibliography/GUIDE.htm>

➤ **Learn about Brain-eating Sea Squirts and More at Hawaii's Fun Site**

Interesting and useful information abounds on Hawaii Sea Grant's award-winning Sea Squirt website. First, visitors learn that "after finding a suitable rock or place to call home, juvenile red sea squirts no longer need their brains, so they eat them. Shaka the shark doles out advice for kids visiting the beach. "Don't stand on coral reef," and "Use the restroom, not the ocean," are two of his points. Downloads include a marine activity workbook, several coloring and activity books and marine life icons for your computer. Links for teachers, kids and parents, a quiz to test knowledge of Hawaiian sea life and a virtual aquarium are more features on the site:
<http://www.soest.hawaii.edu/SEAGRANT/kids/indexkids.html>

➤ **Tales of Whales, Turtles, Sharks, and Snails: An Elementary Level Education Handbook**

This is a marine study guide for Grades 4-6. The purpose of this publication is to increase the awareness, knowledge and literacy of elementary students in marine-related subjects. Also, it's not necessary to be in proximity to a coastal environment in order to benefit from the activities presented in this handbook. For more information visit the website at: <http://www.graysreef.nos.noaa.gov/tw.html>

➤ **National Marine Sanctuary Education Activities**

The National Marine Sanctuaries Act of 1972 that established our nation's marine sanctuaries set forth several specific national goals. Science and education were two critically important goals identified in the Act. Guided by these legislative goals, the national program and field offices have evolved major scientific and education programs and activities over the past two decades. Educational activities from the various sanctuary programs can be found at this web site: <http://www.sanctuaries.nos.noaa.gov/scied/scied.html>